

Amendments to the Claims

This listing of claims will replace all the prior revisions, and listings of claims in this application.

Listing of Claims

1. (Cancelled)

2. (Cancelled)

1 3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

1 7. (Currently Amended) A method of determining the time t_{HOB} to a desired Height Of Burst (HOB) of a projectile comprising the steps of:

3 a. determining, through the effect of a sensor on-board the projectile, when the projectile reaches its apogee after launch;

5 b. measuring the actual time t_a that it takes said projectile to reach its the apogee after launch; and

7 b c. calculating the time to the desired ~~time of burst~~ Height Of Burst t_{HOB} based upon the actual time t_a ;

9 wherein said on-board sensor is one selected from the group consisting of:

10 accelerometric sensor, gyroscopic sensor, velocity sensor, global positioning
1 sensor, inertial sensor, and MEMS.

1 8. (Currently Amended) The method of claim 7 wherein the calculating step b c above
2 comprises setting the t_{HOB} as a percentage X% of t_a wherein said percentage is less than
3 100% and wherein $t_{HOB} = t_a + X\%t_a$

1 9. (Previously Presented) The method of claim 8 wherein said percentage of t_a is calculated
2 as follows:

3 if $t_a > 12$ seconds then down leg time = 90% of t_a ;
4 if $12 \text{ sec} > t_a > 9$ seconds then down leg time = 70% of t_a ;
5 if $9 \text{ sec} > t_a > 7$ seconds then down leg time = 10% of t_a ;
6 if $t_a < 7$ seconds then there may be a malfunction and the projectile should be
7 disabled.

1 10. (Currently Amended) The method of claim 7 wherein said step b c is calculated as
2 follows:

3
$$t_{HOB} = t_a + \sqrt{t_a^2 - 2 \times HOB/g} + C$$

4 where $g = 9.81 \text{ m/sec}^2 = 32 \text{ ft/sec}^2$
5 and C = correction factor.

1 11. (Previously Presented) The method of claim 10 wherein said correction factor C is
2 calculated as follows:

3 if $t_a > 12$ seconds then C = 1.0 sec;
4 if $12 \text{ sec} > t_a > 9$ seconds then C = 0.75 sec;
5 if $9 \text{ sec} > t_a > 7$ seconds then C = 0.5 sec;

6 if $t_a < 7$ seconds then there may be a malfunction and the projectile should be
7 disabled.